

# PATENT COOPERATION TREATY

# PCT

## INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference <b>STANF.130QPC</b>	<b>FOR FURTHER ACTION</b> <small>see Form PCT/ISA/220 as well as, where applicable, item 5 below.</small>	
International application No. <b>PCT/US2007/072419</b>	International filing date (day/month/year) <b>28/06/2007</b>	(Earliest) Priority Date (day/month/year) <b>29/06/2006</b>
Applicant  <b>THE BOARD OF TRUSTEES OF THE LELAND ...</b>		

This international search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This international search report consists of a total of 4 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

**1. Basis of the report**

a. With regard to the language, the international search was carried out on the basis of:

- ☒ the international application in the language in which it was filed  
☐ a translation of the international application into \_\_\_\_\_, which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b))

b. ☐ This international search report has been established taking into account the **rectification of an obvious mistake** authorized by or notified to this Authority under Rule 91 (Rule 43.6bis(a)).

c. ☐ With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, see Box No. I.

2. ☐ **Certain claims were found unsearchable** (See Box No. II)

3. ☐ **Unity of invention is lacking** (see Box No. III)

4. With regard to the title,

- ☒ the text is approved as submitted by the applicant  
☐ the text has been established by this Authority to read as follows:

5. With regard to the abstract,

- ☒ the text is approved as submitted by the applicant  
☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority

6. With regard to the drawings,

- a. the figure of the drawings to be published with the abstract is Figure No. 7  
☒ as suggested by the applicant  
☐ as selected by this Authority, because the applicant failed to suggest a figure  
☐ as selected by this Authority, because this figure better characterizes the invention  
b. ☐ none of the figures is to be published with the abstract

# INTERNATIONAL SEARCH REPORT

International application No  
PCT/US2007/072419

**A. CLASSIFICATION OF SUBJECT MATTER**  
INV. G01D5/353 G01C19/72

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
G01D G01C

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, INSPEC, PAJ

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>DATABASE INSPEC [Online] THE INSTITUTION OF ELECTRICAL ENGINEERS, STEVENAGE, GB; 2002, ZHU YINIAN ET AL: "Photonic crystal fibers and their applications in optical communications and sensors" XP002461746 Database accession no. 7666112 the whole document</p> <p style="text-align: center;">--</p>	1-23

☒ Further documents are listed in the continuation of Box C.

☒ See patent family annex.

### \* Special categories of cited documents:

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

- \*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- \*G\* document member of the same patent family

Date of the actual completion of the international search

11 December 2007

Date of mailing of the international search report

20/12/2007

Name and mailing address of the ISA/  
European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax: (+31-70) 340-3016

Authorized officer

Amroun, Sébastien

## INTERNATIONAL SEARCH REPORT

International application No  
PCT/US2007/072419

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
	& APOC 2002: ASIA-PACIFIC OPTICAL AND WIRELESS COMMUNICATIONS. OPTICAL FIBER AND PLANAR WAVEGUIDE TECHNOLOGY II 16-18 OCT. 2002 SHANGHAI, CHINA, vol. 4904, 18 October 2002 (2002-10-18), pages 37-42, Proceedings of the SPIE - The International Society for Optical Engineering SPIE-Int. Soc. Opt. Eng USA ISSN: 0277-786X -----	
A	JP 01 299413 A (HITACHI CABLE) 4 December 1989 (1989-12-04) abstract; figures -----	1-12
A	EP 0 874 219 A (LITTON SYSTEMS INC [US]) 28 October 1998 (1998-10-28) abstract -----	1
A	GROOTHOFF N ET AL: "BRAGG GRATINGS IN ARI-SILICA STRUCTURED FIBERS" OPTICS LETTERS, OSA, OPTICAL SOCIETY OF AMERICA, WASHINGTON, DC, US, vol. 28, no. 4, 15 February 2003 (2003-02-15), pages 233-235, XP001160161 ISSN: 0146-9592 the whole document -----	1,22

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/US2007/072419

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
JP 1299413	A	04-12-1989	NONE	
EP 0874219	A	28-10-1998	CA 2235259 A1	23-10-1998
			DE 69827065 D1	25-11-2004
			DE 69827065 T2	13-10-2005
			JP 11064006 A	05-03-1999
			US 5847829 A	08-12-1998